MULTI-CD CONTROL
HIGH POWER CASSETTE PLAYER
WITH FM/AM TUNER

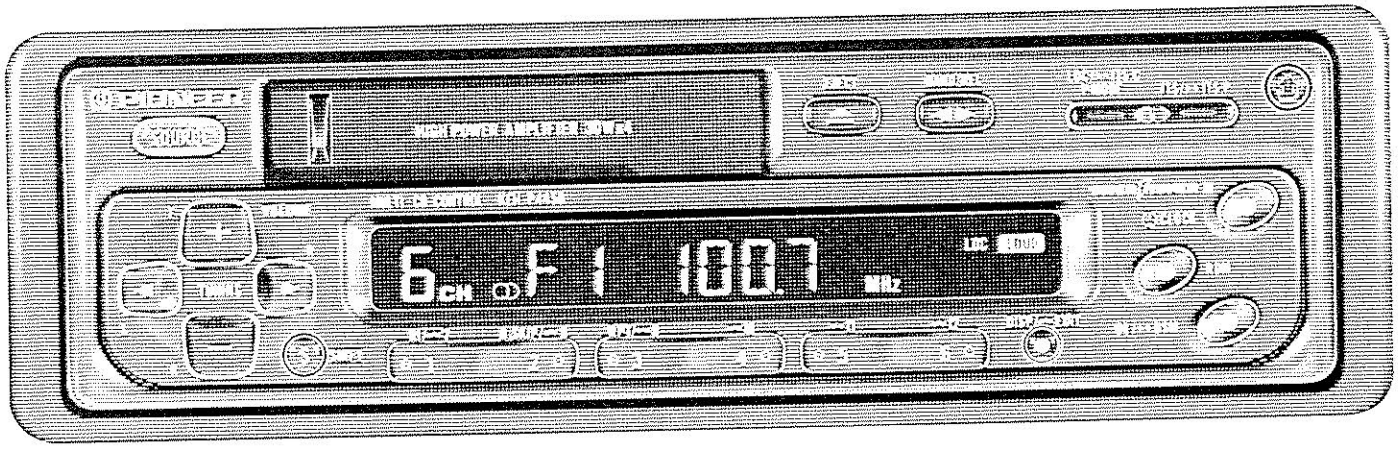
# OWNER'S MANUAL

SUPER TUNER III

PIONEER

*The Art of Entertainment*

# KEH-P4450



ENGLISH

## CONTENTS


Precautions ..... 3
Connecting the Units ..... 4
Installation ..... 6
Using the Removable Front Panel ..... 9
Power ON/OFF ..... 11
Using the Clock ..... 13
Adjusting Volume and Tone ..... 14
Using the Tape Deck ..... 16
Changing the Tuning Steps ..... 19
Using the Radio ..... 21
Using the CD Player ..... 23
Specifications ..... 31


FRANÇAIS

## TABLE DES MATIERES


Précautions ..... 32
Connexion des unités ..... 33
Installation ..... 35
Utilisation de la façade amovible ..... 38
Marche/arrêt ..... 40
Mode d'emploi de l'horloge ..... 42
Réglage du volume et de la tonalité ..... 43
Ecoute d'une cassette ..... 45
Changement de l'étape de syntonisation ..... 48
Utilisation de la radio ..... 50
Utilisation du lecteur de CD ..... 52
Spécifications ..... 60


ESPAÑOL

## ÍNDICE


Precauciones ..... 61
Conexión de las unidades ..... 62
Instalación ..... 64
Uso del panel delantero extraible ..... 67
Activación/desactivación de la alimentación ..... 69
Uso del reloj ..... 71
Ajuste del volumen y tono ..... 72
Usando la platina de cassettes ..... 74
Cambio de pasos de sintonía ..... 77
Usando la radio ..... 79
Utilización del reproductor de CD ..... 81
Especificaciones ..... 89




# Precautions

## Note

- If the car's battery is disconnected for any reason, the preset memory will be erased and must be reprogrammed after reconnecting the battery.

**In case of trouble**
If the unit does not operate properly, contact your dealer or the nearest authorized PIONEER Service Station.
Never remove the top case of the unit to attempt check or repairs.

## Be Careful with Your Cassette

- Do not use tapes longer than C-90-type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport.
- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.

### Cleaning the head

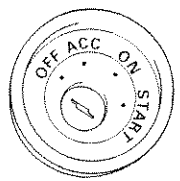
If the heads become dirty, the sound quality will deteriorate and there will be sound dropouts and other imperfections in performance. In this case, the head must be cleaned.

When using a cleaning tape, play it once on one side for normal cleaning. Excessive use of the cleaning tape will increase head wear. Be sure to read the cleaning tape instructions before use.

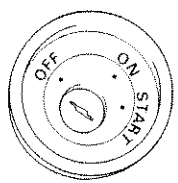
# Connecting the Units

## Note

- This unit is for vehicles with a 12-volt battery and negative grounding. Before installing it in a recreational vehicle, truck, or bus, check the battery voltage.
- To avoid shorts in the electrical system, be sure to disconnect the ⊖ battery cable before beginning installation.
- Check whether installation and wiring have been completed correctly. Replace the removed car components, then connect the end of the cable to the negative ⊖ terminal of the battery.
- Refer to the owner's manual for details on connecting the power amp and other units, then make connections correctly.
- Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap it in adhesive where it lies against metal parts.
- Route and secure all wiring so it cannot touch any moving parts, such as the gear shift, handbrake and seat rails. Do not route wiring in places that get hot, such as near the heater outlet. If the insulation of the wiring melts or gets torn, there is a danger of the wiring short-circuiting to the vehicle body.
- Don't pass the orange lead through a hole into the engine compartment to connect to the battery. This will damage the lead insulation and cause a very dangerous short.
- Do not shorten any leads. If you do, the protection circuit may fail to work when it should.
- Never feed power to other equipment by cutting the insulation of the power supply lead of the unit and tapping into the lead. The current capacity of the lead will be exceeded, causing overheating.
- When replacing fuse, be sure to use only fuse of the rating prescribed on the fuse holder.
- Since a unique BPTL circuit is employed, never wire so the speaker leads are directly grounded or the left and right ⊖ speaker leads are common.
- Speaker connected to this unit must be high-power types possessing minimum rating of 30 W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here can damage the speakers.
- When a power amp is being linked with this system, be sure not to connect the blue lead to the amp's power terminal. Likewise, when linking this system with the auto-antenna, do not connect the blue lead to the antenna's power terminal. Such connections can make overcurrent and cause malfunctions.
- To prevent incorrect connection, the input side of the IP-BUS connector is blue, and the output side is black. Connect the connectors of the same colors correctly.
- When the unit is mounted in a vehicle whose ignition switch does not have the ACC (accessory) position as shown below, be sure to connect the red lead of the unit to the terminal controlled by the ignition switch ON/OFF position. If you do not, the vehicle battery may go flat when you leave your vehicle for several hours.




ACC position

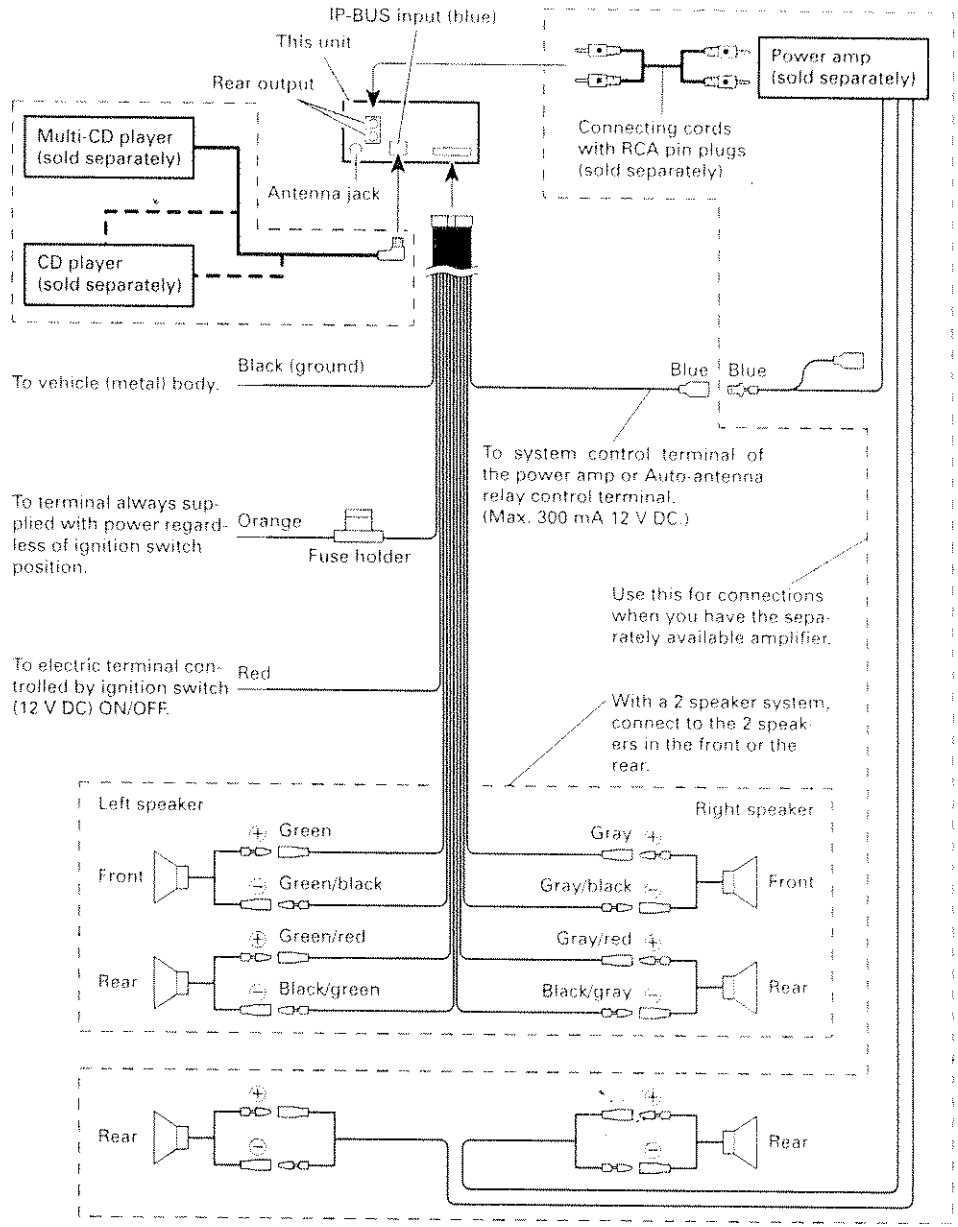



No ACC Position





## Connection Diagram

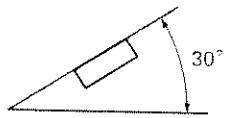



* Please make correct connections according to the directions in the CD player's owner's manual.

# Installation

## Note

- Before installation, connect the wiring temporarily and make sure it is all connected properly and that the unit and the system work properly.
- To ensure proper installation, use only parts included with the unit. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.

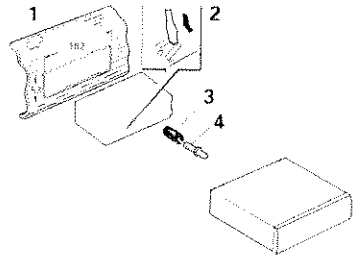



## DIN Front/Rear-mount

This unit can be properly installed either from "Front" (conventional DIN Front-mount) or "Rear" (DIN Rear-mount installation, utilizing threaded screw holes at the sides of the unit chassis). For details, refer to the following illustrated installation methods.

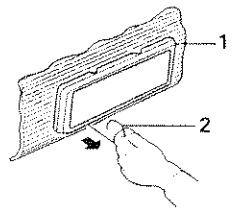
## DIN Front-mount

### Installation with the rubber bush

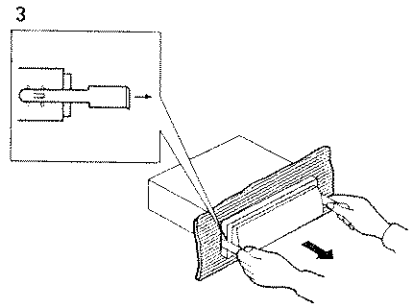



1. Dashboard
2. Holder
   After inserting the holder into the dashboard, select the appropriate tabs according to the thickness of the dashboard material and bend them inwards to secure the holder in place.
3. Rubber bush
4. Screw

### Removing the unit




1. Frame
2. Insert the release pin into the hole in the bottom of the frame and pull out to remove the frame.
   (When reattaching the frame, point the side with a groove downwards and attach it.)
3. Lever
   Insert the levers supplied with the unit into the grooves at both sides of the unit as shown in figure until they click. Pulling the levers makes it possible to remove the unit from the dashboard.

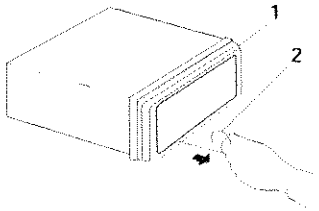



ENGLISH

## DIN Rear-mount

Installation using the screw holes on the sides of the unit.

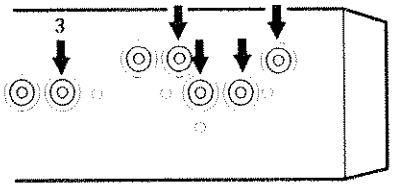
1.

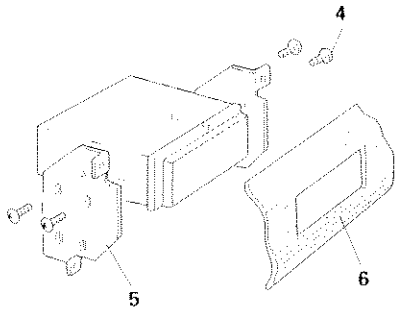



**Remove the frame.**

1. Frame
2. Insert the release pin into the hole in the bottom of the frame and pull out to remove the frame.
   (When reattaching the frame, point the side with a groove downwards and attach it.)

2.




**Fastening the unit to the factory radio mounting bracket.**

3. Select a position where the screw holes of the bracket and the screw holes of the main unit become aligned (are fitted), and tighten the screws at 2 places on each side. Use either truss screws (5 × 8 mm) or flush surface screws (5 × 9 mm), depending on the shape of the screw holes in the bracket.
4. Screw
5. Factory radio mounting bracket
6. Dashbord or Console



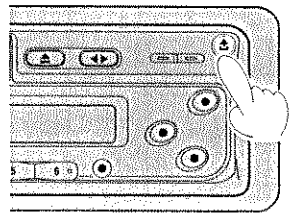
# Using the Removable Front Panel



The front panel of this unit can be removed as a theft deterrent.

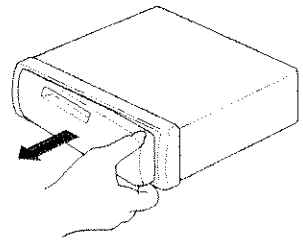
## Detaching the Front Panel

1.



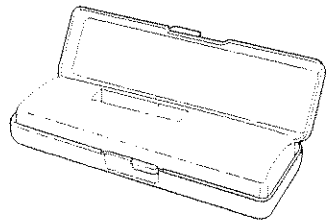
Press the [ ⏏ ] button.

2.



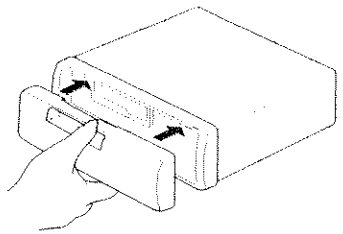
Take the right hand side of the panel and pull out.

3.



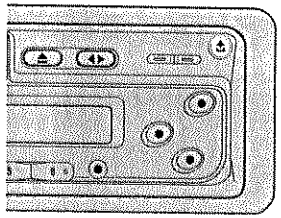
Place in the supplied case.

## Replacing the Front Panel



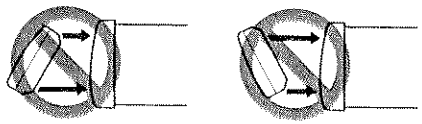
**Push the front panel into the main body.**

- Do not install the front panel while holding down the [ ⏏ ] button. Doing so may destroy the buttons and the main unit.

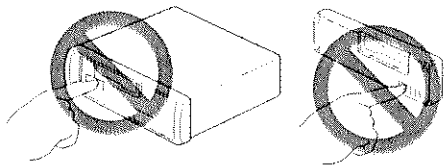


## Note

- Install the front panel holding it parallel to the main unit. Installing the panel tilted, as shown in the illustrations below, may cause the hook on the front panel to destroy the main unit's electrodes.



- Do not touch the contacts on the front panel or on the unit body, since this may result in poor electrical contact. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.



### Precautions When Handling the Front Panel

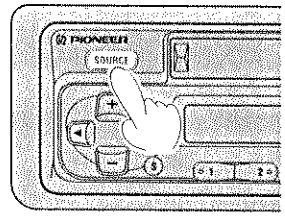
- Do not leave the front panel in any area exposed to high temperatures or direct sunlight.
- Do not drop the front panel or otherwise subject it to strong impact.
- Do not allow volatile agents like benzine, thinners, or insecticides to come into contact with the surface of the front panel.



# Power ON/OFF



## Changing the Source

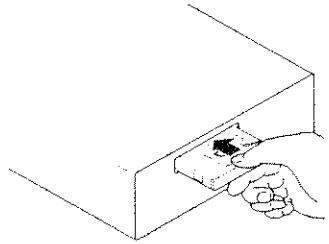



**Each time you press the [SOURCE] button, the source changes as follows:**
**Tape — Radio — Multi-CD player — CD player — AUX — ALL OFF**

- The source does not change to sources that are not connected.
- When there is no cassette tape loaded in this unit, the source does not switch to Tape.
- When there is no magazine loaded in the Multi-CD player, the source does not switch to Multi-CD player.
- When there is no disc loaded in the CD player, the source does not switch to CD player.
- When the AUX (external input) is not set to ON, the source does not switch to AUX.

## Tape

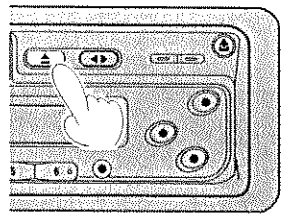
### When a cassette is not loaded



**Insert a cassette tape, the function changes to "TAPE" and the cassette starts to play automatically.**

- If a cassette tape with broken tape is inserted, it will be ejected automatically.

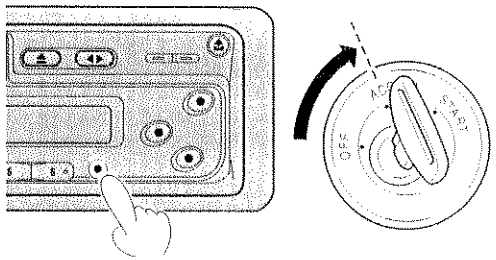
### Eject



**Press the [⏏] button.**

## AUX

When no other components are connected to this unit, or when the AUX (external input) is set to off, the source does not change to AUX. Switch the AUX (external input) to ON.



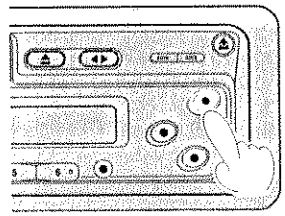
**Hold down the [DISP] button and set the ignition switch from OFF to either ACC or ON.**



# Using the Clock



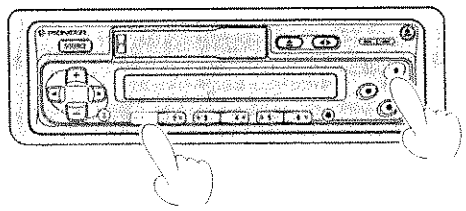
## Displaying the Time



**Press the [CLOCK] button to turn the clock ON/OFF.**

- The clock cannot be displayed when the POWER is OFF.
- When you perform another operation, the clock temporarily disapears from the display. The clock display is restored approximately 25 seconds after the operation.

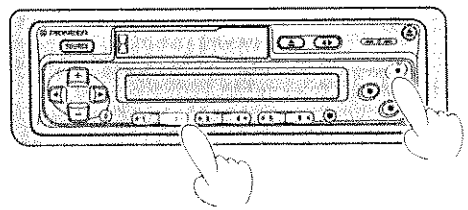
### To adjust the hour



**Hold down the [CLOCK] button and press the [1] button while the clock is displayed.**

- You can adjust the hour and minute successively by pressing the [1] and [2] buttons while holding down the [CLOCK] button.

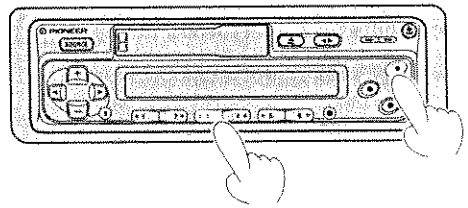
### To adjust the minute



**Hold down the [CLOCK] button and press the [2] button while the clock is displayed.**

- You can adjust the hour and minute successively by pressing the [1] and [2] buttons while holding down the [CLOCK] button.
- The seconds start at "0" when you release the [CLOCK] button.

### To set the exact time

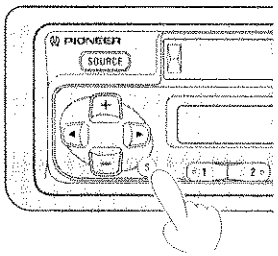


**Hold down the [CLOCK] button and press the [3] button while the clock is displayed.**

- If the minute indication is 00-29, the minutes are rounded down.
  (Example: "10:18" becomes "10:00".)
- If the minute indication is 30-59, the minutes are rounded up.
  (Example: "10:36" becomes "11:00".)

# Adjusting Volume and Tone

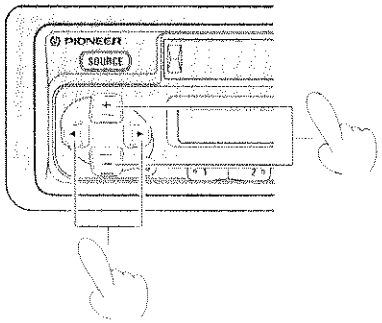
## Mode Selection




**Each press of the [S] button changes the mode as follows:**
**Fader adjustment (FAD) – Tone adjustment (BAS) – Loudness (LOUD) – Volume adjustment (VOL)**

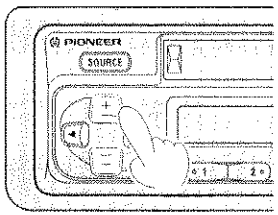
- Fader, Balance, Bass and Treble settings stop temporarily at the center position.
- If no operations are performed within 8 seconds, adjustment modes are cancelled. Make adjustments within 8 seconds.

## Fader/Balance




Press the [◄] or [►] button when in the Fader mode, and the Balance mode "BAL" is indicated in the display. Press the [+] or [–] button when in the Balance mode, and the display changes to "FAD", indicating that you have switched to the Fader mode.

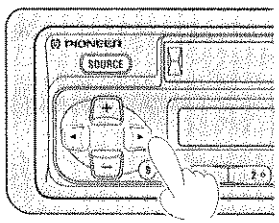
### Fader




**[+]: Shifts the sound toward the front speakers.**
**[–]: Shifts the sound toward the rear speakers.**
(Display shows "FAD F15" ~ "FAD R15".)

- Please set "FAD 0" when using 2 speaker system.

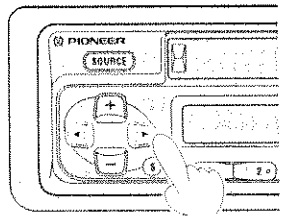
### Balance




**[►]: Shifts the sound toward the right speakers.**
**[◄]: Shifts the sound toward the left speakers.**
(Display shows "BAL L9" ~ "BAL R9".)

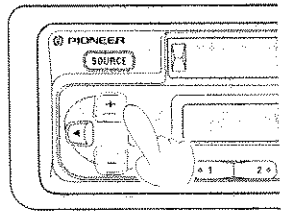


## Bass/Treble




Press the [►] button when in the Bass mode, and the Treble mode "TRE" is indicated in the display. Press the [◄] button when in the Treble mode, and the display changes to "BAS" indicating that you have switched to the Bass mode.

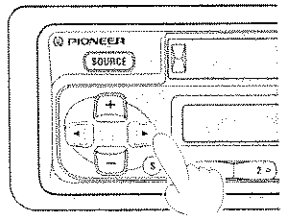
### Adjusting Bass/Treble




[+]: Boosts
[–]: Attenuates
(When in the Bass mode, the display shows "BAS –8" ~ "BAS +4". When in the Treble mode, it shows "TRE –6" ~ "TRE +6".)

## Loudness

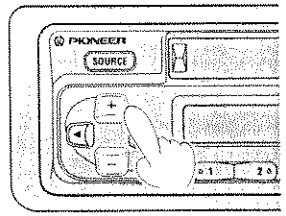
This function enhances both the high and low ranges of sound to give even more power to output at low volume.




Press the [►] button to turn Loudness ON. "LOUD ON" appears in the display. Press the [◄] button to turn Loudness OFF. "LOUD OFF" appears in the display.

[►]: On
[◄]: Off

## Volume

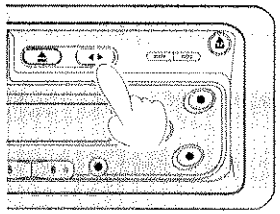



**Pressing the [+] button increases the volume, while the [–] button decreases it.**
(Display shows "VOL 00" ~ "VOL 30".)

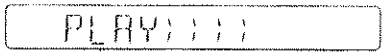
- When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from outside.

# Using the Tape Deck

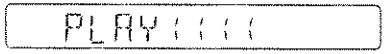
## To Change Sides



**Press the [◄►] button.**
Normal playback.

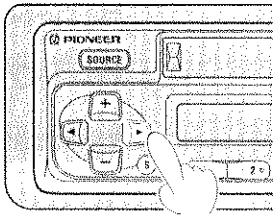



Reverse playback.



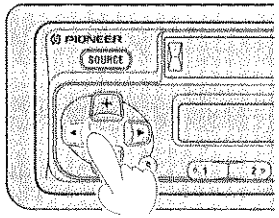

## Fast Forward/Rewind

### Fast forward




**Press the [►] button.**
("FF" appears in the display.)
- To stop fast forwarding, press the [►] button twice, or press the [◄►] button.

### Rewind




**Press the [◄] button.**
("REW" appears in the display.)
- To stop rewinding, press the [◄] button twice, or press the [◄►] button.

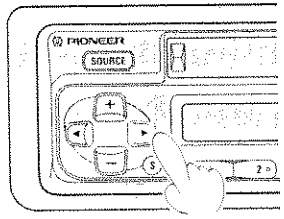




## Music Search

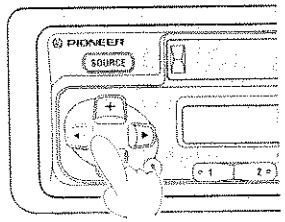
This function lets you rewind to the beginning of the current track or fast forward to the beginning of the next track.

### Forwarding to the next track




**Press the [►] button twice.**
("F-MS" blinks in the display.)
- To stop forwarding before the beginning of the next track, press the [►] or [◄►] button.

### Rewinding the current track

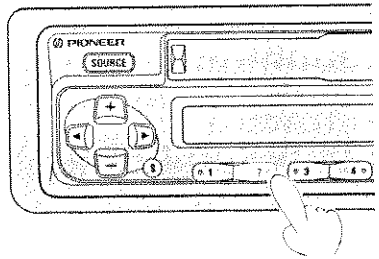



**Press the [◄] button twice.**
("R-MS" blinks in the display.)
- To stop rewinding before the beginning of the current track, press the [◄] or [◄►] button.

**Note**
- Music search will not be able to detect the "blank" portions between selections if they are less than 4 seconds long.
- Music search reads portions recorded at very low volume for more than 4 seconds as blanks between sections.
- Music search reads pauses longer than 4 seconds in recorded conversations as blanks between sections.

## Blank Skip

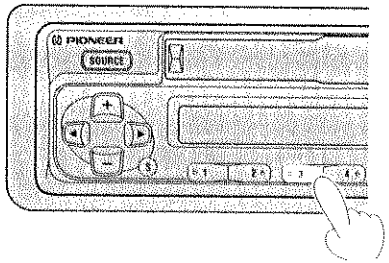
This function lets you set the tape deck to automatically skip over blank spaces longer than 12 seconds during playback.




**Press the [2] button to turn blank skip ON/OFF.**
"B.SKIP" appears in the display when the blank skip function is turned ON.
"B.SKIP" goes out when the blank skip function is turned OFF.

## Repeat

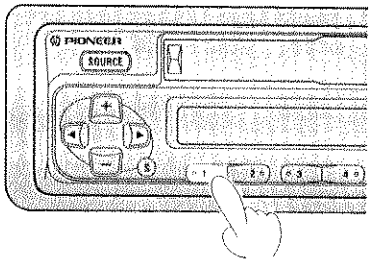
This function lets you play one song repeatedly.



**Press the [3] button to turn repeat ON/OFF.**
"REPEAT" appears in the display when the repeat function is turned ON.
"REPEAT" goes out when the repeat function is turned OFF.

## Radio Intercept

This function lets you listen to the radio while playing, fast forwarding, or rewinding a tape.



**Press the [1] button to turn radio intercept ON/OFF.**
"RI" appears in the display when the radio intercept function is turned ON.
"RI" goes out when the radio intercept function is turned OFF.



# Changing the Tuning Steps

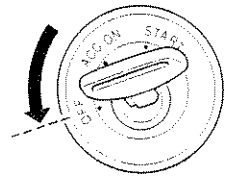


## Changing the AM tuning steps

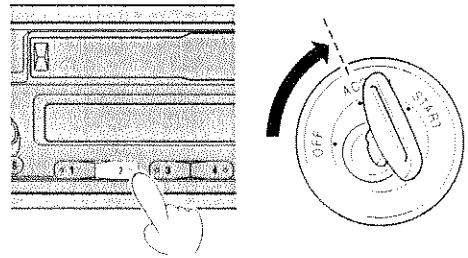
The tuning steps of the AM band for this unit can be switched between 9 kHz and 10 kHz per step. The tuning step should be switched from 9 kHz (which is preset at the factory) to 10 kHz when this unit is used in North America, Central America or South America.

**1.**

**Set the ignition switch to the OFF position.**




**2.**



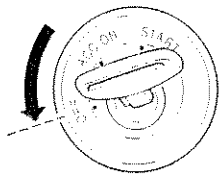

**While pressing the [2] button, set the ignition switch to the ACC or ON position.**
Remember that changing the tuning steps also deletes frequencies stored in the tuning memories.

| | Specification | Initial setting | New setting |
|---|---|---|---|
| AM | Tuning steps | 9 kHz steps | 10 kHz steps |
| | Frequency range | 531 — 1,602 kHz | 530 — 1,710 kHz |

## Changing the FM tuning steps

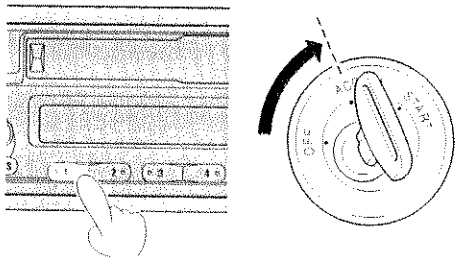
The seek tuning steps of the FM band for this unit can be switched between 100 kHz and 50 kHz per step (Initial setting: 100 kHz). Change it as required.

**1.**



**Set the ignition switch to the OFF position.**

**2.**



**While pressing the [1] button, set the ignition switch to the ACC or ON position.**

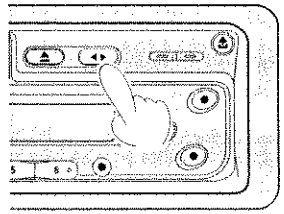
- If seek tuning is performed in 50 kHz steps, a frequency before a broadcasting station frequency may be received. Tune in the station by performing manual tuning or seek tuning again.



# Using the Radio



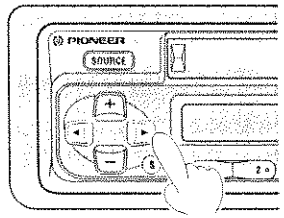
## Selecting a Band



**Press the [◄►] button to select a band.**

F1 (FM1) → F2 (FM2) → F3 (FM3) → AM (AM)

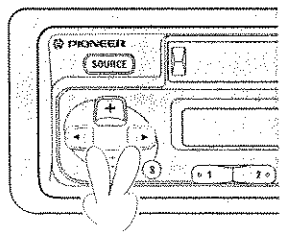
## Seek Tuning



**[◄]: Automatically selects a lower frequency station.**
**[►]: Automatically selects a higher frequency station.**
("MANU" is not displayed.)

## Manual Tuning

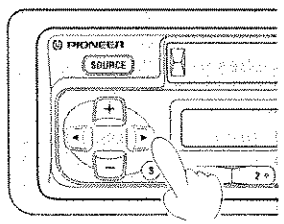
**1.**



**Press both [◄] and [►] buttons at same time.**
("MANU" lights in the display.)

- Each time you repeat this operation, "MANU" either goes out or lights.

**2.**



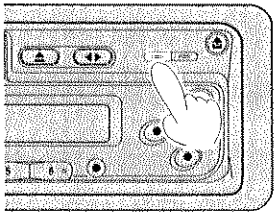
**[◄]: Use to select lower frequencies.**
**[►]: Use to select higher frequencies.**
Continue pressing the button to move up or down continuously through frequencies.

- Tuning moves up or down in 50 kHz steps for FM, 9 kHz steps for AM.
- AM frequencies are tuned in 10 kHz steps after the tuning steps are changed.

## Adjusting Seek Sensitivity

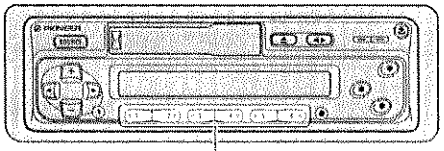
The seek tuning function of this tuner lets you select between a local setting for reception of strong stations only, and a DX (distant) setting for reception of weaker stations.

### Switching between local and DX



**Press the [LOC] button.**
Each time you press the button, you switch between local and DX.
Local position: "LOC" is displayed.
DX position : "LOC" is not displayed.

## Preset Memory



Preset buttons

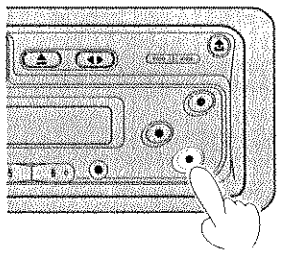
**Tune into the station you want to memorize, and press the desired preset button for 2 seconds or more.**
FM :18 stations can be memorized.
(6 stations each for FM1/FM2/FM3)
AM :6 stations can be memorized.

To recall a memorized station, briefly press the preset button for the station you desire. (The selected preset number lights in the display.)

## BSM (Best Stations Memory)

This function automatically locates stronger stations and automatically assigns their frequencies to preset buttons [1 - 6], in order of strength.

It comes in handy when trying to find local stations while driving.



**Select the desired band, and press the [BSM] button for 2 seconds or more.**
("BSM" flashes in the display until BSM operation is completed.)
- If there are fewer than 6 strong stations in the area, some of the preset buttons will not be assigned frequencies, so they will retain any frequencies assigned to them previously.



# Using the CD Player

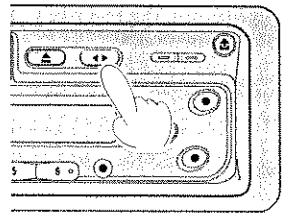


## Precautions When Using the CD Control

- This unit can control multi-CD players (CDX-P2000, CDX-P610) and CD player (CDS-P77).
- If the multiple installation adapter (CD-P44) is used, up to 4 multi-CD players can be connected. When two or more multi-CD players are connected, their priorities must be specified for the multi-CD players. See the instructions supplied with the multi-CD players and set the address switches correctly.
- CD player operation is explained in the CD player's owner's manual, but because this unit is controlling the CD player, refer to this manual for details concerning operation.
- When the multi-CD player and CD player is not working correctly, an error message appears on the display (Ex.: "ERROR-80"). Use the multi-CD player and CD player owner's manual to identify the error.

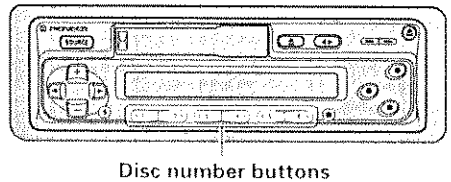
## Switching the multi-CD player (multi-CD player's function)

A maximum of 4 multi-CD players can be connected to this unit.



**Press the [◀▶] button to choose the desired multi-CD player.**
(The number of the multi-CD player you selected appears in the display.)
- You cannot perform this operation if only one multi-CD player is connected.
- You cannot choose multi-CD players that do not have a magazine loaded.

## Disc Number Search (multi-CD player's function)



Disc number buttons

**Press a disc number button to select discs numbered 1~6.**
Disc number buttons [1 - 6] select disc numbers 1~6 respectively.

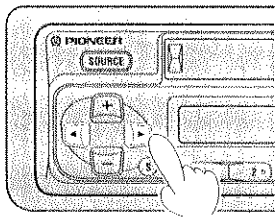
**To select a disc numbered 7~12 when using a 12-disc multi-CD player, hold down the disc number button for 2 seconds or more.**
Disc number buttons [1 - 6] select disc numbers 7~12 respectively.

- The number of the disc you selected appears in the display.
- You cannot choose discs that are not loaded in the magazine.

**Note**
- When you turn the power on or change discs, the multi-CD player may perform a preparatory operation (verifying there is a disc, reading disc information, etc.). "READY" is displayed during this time.

## Track Number Search

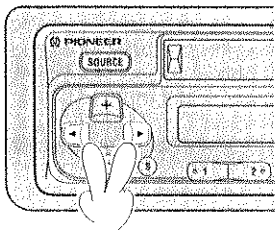
You can search for a specific track on the disc currently being played.



**[►]: Searches for higher track numbers.**
**[◄]: Searches for lower track numbers.**
("MANU" is not displayed.)
- Holding down either button changes the track numbers at high speed.

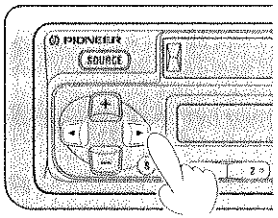
## Fast Forward/Reverse

1.



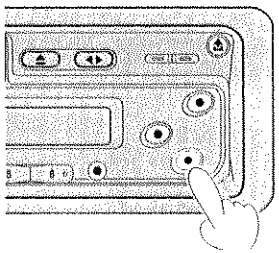
**Press both [◄] and [►] buttons at same time.**
("MANU" lights, and the track number display changes to the elapsed time display.)
- Each time you repeat this operation, "MANU" either goes out or lights.

2.



**[►]: fast forwards.**
**[◄]: reverses.**
- Sound is output during fast forward and reverse.

## Pause



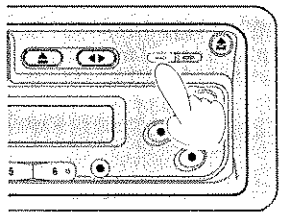
**Press the [II] button.**
("PAUSE" appears in the display.)
Playback pauses.

**Press the [II] button again.**
(The track number (elapsed time) appears in the display.)
Playback resumes.



## Repeat Play

You can listen repeatedly to a track (song), one track, a disc, or an entire multi-CD player.



### Multi-CD player's function

**Each time you press the [P.MODE] button, the play (repeat) mode changes as follows: One-track repeat → Disc repeat → Multi-CD player repeat (normal play) → All repeat**

### CD player's function

**Each time you press the [P.MODE] button, the play (repeat) mode changes as follows: One-track repeat → Disc repeat (normal play)**

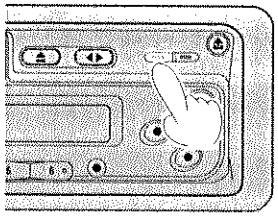
| Play mode (repeat mode) | Operation |
|---|---|
| One-track repeat ("REPEAT" lights) | Play the current track repeatedly.<br>• When you perform track number search or fast forward or rewind, the mode changes to disc repeat mode.<br>• Switching the multi-CD player being played or the disc switches to multi-CD player repeat mode. |
| Disc repeat (Multi-CD player: "DISC" lights CD player: nothing lights) | Play the same disc repeatedly.<br>• Switching the multi-CD player being played or the disc switches to multi-CD player repeat mode. |
| **Multi-CD player's function** Multi-CD player repeat ("M-CD" lights) | Play all discs loaded in the magazine in the multi-CD player repeatedly. All discs in the magazine are played repeatedly from the first disc. |
| **Multi-CD player's function** ALL repeat* (nothing lights) | Multi-CD players 1 to 4 are played. |

* When 2 or more multi-CD players are connected.

## Random Play

You can listen to songs from one disc, or an entire multi-CD player, at random by letting the microcomputer choose the songs.

1.

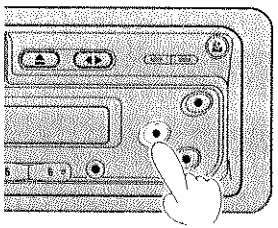


**Press the [P.MODE] button repeatedly to select the play (repeat) mode.**
Choose the play (repeat) mode according to the type of random playback you desire.

| Play mode (repeat mode) | Tracks to be played at random |
|---|---|
| One-track repeat ("REPEAT" lights) | All tracks on the disc being played.<br>• The play mode changes to disc repeat mode. |
| Disc repeat (Multi-CD player: "DISC" lights CD player: nothing lights) | All tracks on the disc being played. |
| **Multi-CD player's function** Multi-CD player repeat ("M-CD" lights) | All tracks on the discs in the magazine being played. |
| **Multi-CD player's function** ALL repeat* (nothing lights) | All tracks on all discs in multi-CD players 1 to 4. |

* When 2 or more multi-CD players are connected.

2.



**Press the [RDM] button to turn the random function ON/OFF.**
"RDM" appears in the display when the random function is turned ON.
"RDM" disappears from the display when the random function is turned OFF.

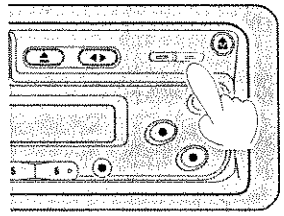


## ITS (Instant Track Selection) (multi-CD player's function)

This function lets you program and play your favorite tracks.

- The ADPS function* of the multi-CD player lets you program up to 100 discs. (Up to 100 discs can be programmed including disc title inputs.)
  *ADPS: Automatic Disc Program Selection
- Up to 99 tracks can be programmed for a single disc.
- After the 100th disc, data for a new disc will overwrite the data of the oldest disc that has not been played back (information that has not been updated).
- Tracks are programmed for each disc. Programmed tracks are not erased after the disc is changed.

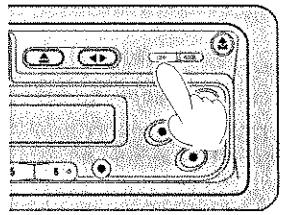
### How to program a track



**Press the [ITS] button while playing a track you want to program.**
("ITS" appears in the display for 2 seconds.)
- You can program tracks during random or repeat play but not during ITS play.

### How to play programmed tracks

1.

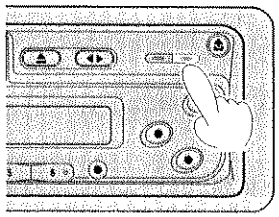


**Press the [P.MODE] button repeatedly to select the play (repeat) mode.**
Choose the play (repeat) mode according to the type of ITS playback you desire.

| Play mode (repeat mode) | Tracks to be played by ITS |
|---|---|
| One-track repeat ("REPEAT" lights) | Programmed tracks on the disc being played.<br>• The play mode changes to disc repeat mode. |
| Disc repeat ("DISC" lights) | Programmed tracks on the disc being played. |
| Multi-CD player repeat ("M-CD" lights) | Programmed tracks on the discs in the magazine being played.<br>• If the disc being played contains no programmed tracks, the next disc containing programmed tracks is played. |
| ALL repeat* (nothing lights) | Programmed tracks on all the discs in all the magazines in multi-CD players 1 to 4.<br>• If the disc (multi-CD) being played contains no programmed tracks, the next disc (multi-CD) containing programmed tracks is played. |

* When 2 or more multi-CD players are connected.

2.



**Press and hold the [ITS.P] button for more than 2 seconds turn the ITS play ON/OFF.**
"ITS.P" appears in the display when ITS play is turned ON.
"ITS.P" disappears from the display when the ITS play is turned OFF.

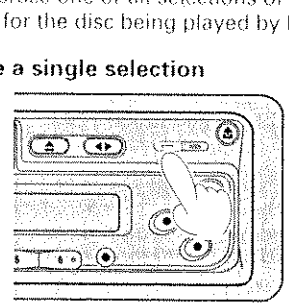
**Note**
- If you try to play a track that is not programmed within the play range of the selected repeat mode by ITS, "EMPTY" will appear on the display for about 2 seconds, indicating that ITS play is not possible.
- You can perform random play during ITS play. In this case, random play applies to all the tracks stored in memory. ("ITS.RD" appears in the display.)
- During ITS play, multi-CD players containing discs with programmed tracks are switched, and disc and track number search is performed on programmed tracks. So, you cannot switch to any tracks or discs that are not stored in memory.
- When you turn the power on or change the disc to be played, the multi-CD player may perform a preparatory operation (verifying there is a disc, reading disc information, etc.). "READY" is displayed during this time.



## How to Erase Programmed Tracks

You can erase one or all selections of the program for the disc being played by ITS.

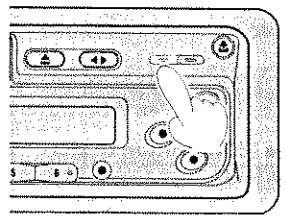
### To erase a single selection



**During ITS playback, use track number search (etc.) to locate the track you want to erase.**

**Hold down the [ITS.C] button for more than 2 seconds.**
The track being played is erased from ITS memory and playback starts from the next memorized track.
- "EMPTY" appears in the display for 2 seconds and ITS playback is cancelled when there are no more tracks to erase.

### To erase the disc program



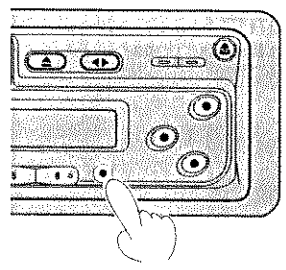
**During normal playback, use disc number search (etc.) to locate the disc you want to erase.**

**Hold down the [ITS.C] button for more than 2 seconds.**
("CLEAR" appears in the display for about 2 seconds.)
The disc being played is erased from ITS memory.

## Disc Title Function

This function lets you enter, and display, titles for discs loaded in the multi-CD player(s) and CD player.
- This function is valid only when the multi-CD player is connected to this unit.
- The ADPS function* of the multi-CD player lets you enter titles for up to 100 discs. (Up to 100 discs, including ITS, can be programmed.)
  *ADPS: Automatic Disc Program Selection
- A disc title can consist of up to 8 characters for a single disc.
- After the 100th disc, data for a new disc will overwrite the data of the oldest disc that has not been played back (information that has not been updated).
- One title is stored for each disc. The title stored for a disc is not erased after the disc is changed.

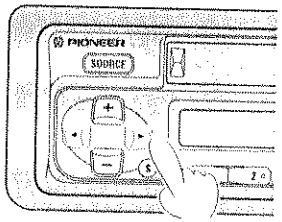
1.



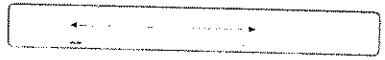
**Use disc number search (etc.) to find the disc you wish to enter a title for.**

**Hold down the [EDIT] button for more than 2 seconds to activate the title input mode.**
(The cursor blinks in the display.)

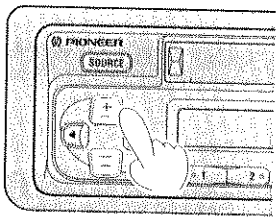
2.



**Press the [◄] or [►] button to select the input positon.**



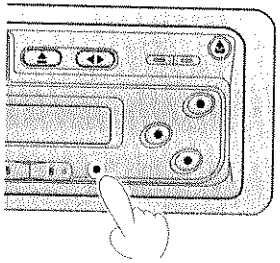
3.



**Press the [+] or [–] button to select the character you desire.**
Holding down either button changes the characters rapidly.

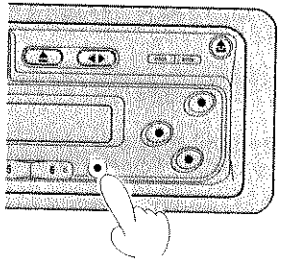
**Repeat steps 2 and 3 to enter up to 8 characters.**

4.



**Press the [EDIT] button to store them in memory.**

## Switching The Display



**Press the [DISP] button to switch between the track number (elapsed time) and the disc title.**

- When the disc title is displayed, pressing the [◄►] button displays the track number (elapsed time) for 8 seconds.
- "NO TITLE" flashes in the display for 8 seconds if the disc does not have a memorized title.



# Specifications

**General**

| | | | |
|---|---|---|---|
| Power source | | | 14.4 V DC (10.8 — 15.1 V allowable) |
| Grounding system | | | Negative type |
| Max. current consumption | | | 7.5 A |
| Dimensions | (DIN) | (mounting size) | 178 (W) × 50 (H) × 150 (D) mm |
| | | (nose) | 188 (W) × 58 (H) × 19 (D) mm |
| | (D) | (mounting size) | 178 (W) × 50 (H) × 155 (D) mm |
| | | (nose) | 170 (W) × 48 (H) × 14 (D) mm |
| Weight | | | 1.2 kg |

**Amplifier**

Continuous power output is 14 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5 % THD.

| | |
|---|---|
| Maximum power output | 30 W × 4 |
| Continuous power output | 14 W × 4 (1 % dist. at 1 kHz) |
| Load impedance | 4 Ω (4 — 8 Ω allowable) |
| Preout output level/output impedance | 500 mV/1 kΩ |
| Tone controls (bass) | +8 dB — –16 dB (100 Hz) |
| (treble) | ±12 dB (10 kHz) |
| Loudness contour | +10 dB (100 Hz), +7 dB (10 kHz) (Volume: –30 dB) |

**Tape player**

| | |
|---|---|
| Tape | Compact cassette tape (C-30 — C-90) |
| Tape speed | 4.8 cm/sec. |
| Fast forward/rewind time | Approx. 100 sec. for C-60 |
| Wow & flutter | 0.09 % (WRMS) |
| Frequency response | 30 — 16,000 Hz (±3 dB) |
| Stereo separation | 45 dB |
| Signal-to-noise ratio | 61 dB (IEC-A network) |

**FM tuner**

| | |
|---|---|
| Frequency range | 87.5 — 108 MHz |
| Usable sensitivity | 11 dBf (1.0 μV/75 Ω, mono, S/N: 30 dB) |
| 50 dB quieting sensitivity | 16 dBf (1.7 μV/75 Ω, mono) |
| Signal-to-noise ratio | 70 dB (IEC-A network) |
| Distortion | 0.3 % (at 65 dBf, 1 kHz, stereo) |
| Frequency response | 30 — 15,000 Hz (±3 dB) |
| Stereo separation | 40 dB (at 65 dBf, 1 kHz) |

**AM tuner**

| | |
|---|---|
| Frequency range | 531 — 1,602 kHz (9 kHz) |
| | 530 — 1,710 kHz (10 kHz) |
| Usable sensitivity | 18 μV (25 dB) (S/N: 20 dB) |
| Selectivity | 50 dB (±9 kHz) |
| | 50 dB (±10 kHz) |

**Note:**
Specifications and design are subject to possible modification without notice due to improvements.